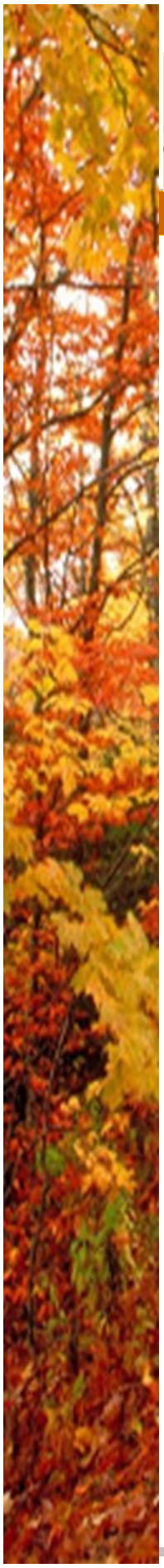


Epi News

PUBLIC HEALTH SERVICES DISTRICT
COCONINO COUNTY

Fall-Winter 2014

Ebola in The News

If you work in public health or healthcare, turned on your TV, surfed the internet or listened to the radio recently, you know there is an Ebola outbreak in West Africa.

Current Information

As of November 18, 2014, the total cases of Ebola in West Africa was estimated to be 15,351. More than half of the cases (9,596 cases) are laboratory confirmed and there have been 5,459 deaths from Ebola.

The Virus

Ebola virus is part of the *Filoviridae* family and genus *Ebolavirus.* There are 5 Ebola species including four that can affect humans and one species that is known to affect only nonhuman primates. The 2014 West Africa Ebola outbreak is caused by the *Zaire Ebolavirus* species. Ebola was first discovered in 1976 near the Ebola River in what is now the Democratic Republic of Congo.

United States Cases

Four U.S. health workers and one journalist who were infected with Ebola virus in West Africa were transported to hospitals in the US for care. All patients have recovered and are Ebola free. On September 30, 2014 the US had its first confirmed case of Ebola in a traveler who was not a healthcare worker. The case, a Liberian man, died October 8, 2014. Two healthcare workers who assisted in the care of the index case were confirmed Ebola patients but have since recovered. The latest US Ebola confirmed case is a healthcare worker who traveled to West Africa to help with Ebola outbreak and is currently receiving treatment in New York City. No secondary cases have been identified.

Resources

Centers for Disease Control and Prevention have available resources for Healthcare workers including proper PPE protocols, algorithms, PowerPoints, visuals for the office and much more. Please visit **CDC.gov/Ebola** and follow the link for Healthcare Workers. For a suspect case in Coconino County: please call 928.255.8715.

Tick– Bourne Relapsing Fever (TBRF) Outbreak

Cases in Coconino County

On August 10, 2014 CCPHSD received a call from a local hospital that five high school-aged students were hospitalized with a fever, headache and myalagia after a trip to a wilderness camp. Hantavirus was initially suspected until tick-borne relapsing fever was confirmed. This outbreak resulted in six confirmed and five probable cases. During 1982–2013, a total of 22 TBRF cases (0–3 cases annually) were reported in Arizona. This is the largest recorded outbreak among Arizona residents in the last 30 years.

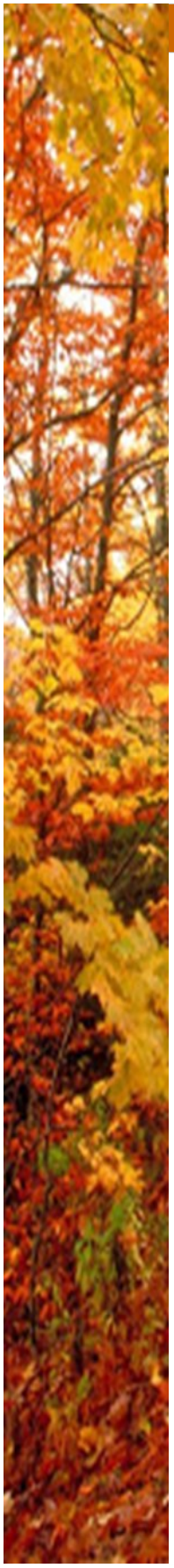
The Bacteria

The *Borrelia* bacteria that cause TBRF are transmitted to humans through the bite of infected "soft ticks" of the genus *Ornithodoros (hermsi, parkeri and turicata*). The tick associated with this outbreak was *Ornithodoros hermsi* which tends to be found at higher altitudes (1,500 to 8,000 feet). The ticks' hosts are primarily rodents including mice, tree ground squirrels and chipmunks. In the United States, the illness occurs most commonly in western states, including Arizona.

The Illness

Relapsing fever is characterized by episodes of fever lasting several days, followed by an interval without fever, followed by another episode of fever. This process can recur from one to four times. Along with fever, patients may experience generalized body aches, muscle pain, joint pain, headache, nausea, vomiting, anorexia, dry cough, light sensitivity, rash, neck pain, eye pain, confusion and dizziness. For more information regarding TBRF please visit: **www.cdc.gov/relapsing-fever.**

CCPHSD Disease Reporting
928.679.7222 (8AM – 5PM Mon-Fri.), 928.679.7351 FAX
After hours urgent reports only: 928.255.8715.
Crystal Cordova, NAU intern working with the epidemiology/emergency preparedness team is guest author of this issue. Thanks to her for all of her contributions during her internship.



Plague in Coconino County

On September 24, CCPHSD confirmed that fleas collected in the Doney Park area near Flagstaff tested positive for plague. The tests were conducted by the Center for Microbial Genetics and Genomics at Northern Arizona University.

Plague is a disease of rodents caused by the bacterium *Yersinia pestis* that can be spread to humans and other animals by infected fleas. Plague has 3 forms: Bubonic plague, infection of the lymph glands; septicemia plague, infection of the blood; and pneumonic plague, infection of the lungs. Pneumonic plague is the rarest and most contagious form. When recognized early, plague can be treated with antimicrobial drugs, such as streptomycin, gentamicin, tetracycline, or chloramphenicol.

The general public should be instructed to prevent pets from roaming loose, de-flea pets, do not handle sick or dead animals, use insect repellents and be aware of their surroundings in response to prevent them from contracting plague.
For more information:
http://www.cdc.gov/plague/

Selected Communicable Diseases, Coconino County Residents Year-to-Date 2014 Compared to 2013

	Jan 1-Sep 30 2013	Jan 1-Sep 30 2014
Amebiasis	2	0
Aseptic meningitis, viral	2	1
Campylobacteriosis	13	17
Chlamydia, genital	568	610
Coccidioidomycosis	11	32
Creutzfeldt-Jakob disease	1	0
Cryptosporidiosis	3	5
E. coli enterohemorrhagic (shiga toxin)	2	1
Giardiasis	8	5
Gonorrhea	89	82
Haemophilus influenzae, invasive disease	1	4
Hantavirus infection	1	1
Hepatitis A	0	1
Hepatitis B	6	14
Hepatitis C	33	31
Herpes Simplex Virus	21	19
HIV Infection and related disease	2	3
Influenza virus	542	505
Influenza with mortality in a child	1	0
Kawasaki Syndrome	0	1
Legionellosis	0	1
Lyme disease	0	1
MRSA	7	2
Pertussis	10	11
Relapsing fever	0	8
Rocky Mtn. spotted fever	0	1
RSV	218	131
Salmonellosis	6	35
Scabies	0	3
Shigellosis	1	0
Streptococcal Group A, invasive	1	5
Streptococcus pneumoniae, invasive	8	16
Syphilis	6	6
Varicella (chickenpox)	3	20
Total	**1566**	**1573**

*Data include confirmed and probable cases among county residents, by date reported, using local classification. Data are provisional.

PUBLIC HEALTH SERVICES DISTRICT
COCONINO COUNTY

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Visit www.coconino.az.gov/health for more information or to view previous issues of Epi News.